# PRELIMINARY PROGRAM Ninth Annual V. M. Goldschmidt Conference August 22–27, 1999

The following is a list of technical sessions along with their rooms and times. To view the full program listing, simply use your Reader's hand tool to click on the name of a session you're interested in. The full program listing for that session will appear, at which point you can click on the title of a presentation to view the abstract. Asterisks next to an author's name indicate the speaker, and numbers in brackets following a title indicate the abstract number. Titles that are NOT followed by a number do not have an accompanying abstract.

## Monday Morning, 8:15 a.m.

Lecture Hall B Plenary Session I: Introductory Remarks

## Monday Morning, 8:30 a.m.

Lecture Hall A	Global Cycles of Calcium and Carbon: Records and Models				
Lecture Hall B	Absolute Timescale Calibration from the Big Bang to Noah's Ark				
Lecture Hall C	The Nature of Igneous Layering and Melt Transport in Oceanic and				
	Continental Layered Intrusions				
Lecture Hall D	Atmospheric Geochemistry				
Lecture Hall E	Geochemical Kinetics: Studies of Diffusion, Sorption, and Dissolution				

#### Monday Afternoon, 1:30 p.m.

Lecture Hall A	Molecular Records of Biological and Ecological Evolution: From				
	Biomarkers to Phylogenetics				
	and				
	3:30 p.m. Biogeochemistry				
Lecture Hall B	Dating Isotopic Signatures in the Early Solar System				
Lecture Hall C	Mantle Melting: Sources, Timescales, Melt Migration, and Melt-Solid				
	Interaction. Part I: Mid-Ocean Ridges				
Lecture Hall D	History of Ocean Water and Its Salts				
Lecture Hall E	Geochemistry of Hydrothermal Ore Deposits and Aqueous				
	Geochemistry I: A Symposium in Honor of Hubert L. Barnes				

## Monday Afternoon, 5:15 p.m.

Lecture Hall B Plenary Session II: Induction of the 1999 EAG/GS Geochemistry Fellows

5:30 p.m. Geochemical Society Presidential Address by Michael J. Drake

## Tuesday Morning, 8:30 a.m.

Lecture Hall A	Black Carbon in the Environment I: Analytical Challenges			
Lecture Hall B	Origin and Early Evolution of the Terrestrial Planets			
Lecture Hall C	Mantle Melting: Sources, Timescales, Melt Migration, and Melt-Solid			
	Interaction. Part II: The Arc Environment			
Lecture Hall D	Marine Geochemistry I: Rare Earth Elements and Iron-Manganese Crusts			
Lecture Hall E	Geochemistry of Hydrothermal Ore Deposits and Aqueous			
	Geochemistry II: A Symposium in Honor of Hubert L. Barnes			

## Tuesday Afternoon, 1:30 p.m.

Lecture Hall A	Black Carbon in the Environment II: Soils				
Lecture Hall B	Continent Formation and Evolution I: Early Earth and Crustal Growth Rates				
Lecture Hall C	Mantle Melting: Sources, Timescales, Melt Migration, and Melt-Solid				
	Interaction. Part III: Melt Inclusions and Peridotites				
Lecture Hall D	Marine Geochemistry II: Marine Chemistry				
Lecture Hall E	Geochemistry of Hydrothermal Ore Deposits and Aqueous				
	Geochemistry III: A Symposium in Honor of Hubert L. Barnes				

## Tuesday Afternoon, 5:15 p.m.

Lecture Hall B Plenary Session III: Patterson Award

5:35 p.m. Lecture by Gerald J. Wasserburg

## Tuesday Evening, 8:30–10:00 p.m.

Science Center Poster Session

## Wednesday Morning, 8:30 a.m.

Lecture Hall A	Black Carbon in the Environment III: Sediments
Lecture Hall B	Goldschmidt's Legacy I: A Symposium in Honor of Brian Mason
Lecture Hall C	Mantle Melting: Sources, Timescales, Melt Migration, and Melt-Solid
	Interaction. Part IV: Ocean Island Basalts

#### Wednesday Morning, 8:30 a.m. (continued)

Lecture Hall D Marine Geochemistry III: Paleoceanography and Paleoclimatology

Lecture Hall E Geochemistry of Hydrothermal Ore Deposits and Aqueous

Geochemistry IV: A Symposium in Honor of Hubert L. Barnes

#### Wednesday Afternoon, 1:30 p.m.

Lecture Hall A Geochemical Perspectives on Weathering

Lecture Hall B Goldschmidt's Legacy II: A Symposium in Honor of Brian Mason

and

**3:30 p.m.** Continent Formation and Evolution II: Dynamics of

Growth and Loss

Lecture Hall C Mantle Melting: Sources, Timescales, Melt Migration, and Melt-Solid

Interaction. Part V: Ocean Island Basalts and Continental Lavas

Lecture Hall D Marine Geochemistry IV: Paleoceanography and Paleoclimatology

Lecture Hall E Isotopic Tracers of Human Influence on the Environment

## Wednesday Evening, 6:30–9:30 p.m.

Memorial Hall 6:30 – 7:30 p.m. Cocktail Hour

7:30 – 9:30 p.m. Banquet, Goldschmidt and Clarke Awards

## Thursday Morning, 8:30 a.m.

Lecture Hall A Microbial Biogeochemistry I: Aquatic and Sediments

Lecture Hall B Continent Formation and Evolution III: Recycling and Subduction Flux

and

9:30 a.m. Continent Formation and Evolution IV: Lower Crust

Lecture Hall C The Deep Earth: Reconciling Geochemical, Geophysical, and

**Mineral Physics Constraints** 

Lecture Hall D Precambrian Oceans and Atmospheres I

Lecture Hall E Availability and Reactivity of Environmental Contaminants

#### Thursday Afternoon, 1:30 p.m.

Lecture Hall A Microbial Biogeochemistry II: Aquatic and Sediments

Lecture Hall B Continent Formation and Evolution V: Lithospheric Mantle

Lecture Hall C Experimental Petrology

Lecture Hall D Precambrian Oceans and Atmospheres II

Lecture Hall E Environmental Geochemistry I: Field Studies

## Thursday Afternoon, 5:15 p.m.

Lecture Hall B Plenary Session IV: Urey Award

**5:35 p.m.** Lecture by Karl K. Turekian

## Friday Morning, 8:30 a.m.

Lecture Hall B Crustal Geochemistry I

Lecture Hall C Advances in Analytical Techniques I

Lecture Hall D Geochemical Signatures of Mass Extinction

Lecture Hall E Environmental Geochemistry II: Experimental Studies

## Friday Afternoon, 1:30 p.m.

Lecture Hall B Plenary Session V: Paul Gast Lecture by Bernard J. Wood

## Friday Afternoon, 3:00 p.m.

Lecture Hall A	<b>Experimental</b>	and Theoretical	Geomicrobio	ology II

Lecture Hall B Crustal Geochemistry II

Lecture Hall C Mantle Geochemistry

Lecture Hall D Advances in Analytical Techniques II

Lecture Hall E Environmental Geochemistry III: Theoretical and Isotopic Studies

## **Print-Only Presentations**